**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**:

1.-16. (Cancelled)

17. (Currently Amended) A cast aluminum alloy, wherein the alloy comprises
3.0-6.0 % by weight magnesium (Mg),
> 1.0 - 4.0 % by weight silicon (Si),
0.01 - < 0.5 % by weight scandium (Sc),
~~0.005 – 0.2~~ 0.05-0.15 % by weight titanium (Ti),
at least 0.001 % by weight gadolinium (Gd),
0-0.05 % by weight zinc (Zn)
0 - 0.5 % by weight of at least one element selected from the group consisting of zirconium (Zr), hafnium (Hf), molybdenum (Mo), terbium (Tb), niobium (Nb), ~~gadolinium (Gd),~~ erbium (Er) and vanadium (V),
0 - 0.8 % by weight manganese (Mn),
0 - 0.3 % by weight chromium (Cr),
0 - 1.0 % by weight copper (Cu),
0 - 0.6 % by weight iron (Fe),
0 - 0.004 % by weight beryllium (Be),
the remainder being aluminum,
provided that the total amount of impurities is not more than 0.5 % by weight and provided that no single impurity is present in an amount of more than 0.1 % by weight.

18-19. (Cancelled)

20. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 1.1 - 4.0 % by weight silicon (Si).

21. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 1.1 - 3.0 % by weight silicon (Si).

22. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.01 - 0.45 % by weight scandium (Sc).

23. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.015 - 0.4 % by weight scandium (Sc).

24-25. (Canceled)

26. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.01 - 0.3 % by weight zirconium (Zr).

27. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.05 - 0.1 % by weight zirconium (Zr).

28. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains at least 0.001 % by weight vanadium (V).

29. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains at least 0.008 % by weight vanadium (V).

30. (Cancelled)

31. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.001 - 0.3 % by weight chromium (Cr).

32. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.0015 - 0.2 % by weight chromium (Cr).

33. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.001 - 1.0 % by weight copper (Cu).

34. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.5 - 1.0 % by weight copper (Cu).

35. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.001 - 0.05 % by weight zinc (Zn).

36. (Previously Presented) The cast aluminum alloy according to claim 17, wherein the alloy contains 0.05 - 0.6 % by weight iron (Fe).

37. (Previously Presented) The cast aluminum alloy according to claim 17, wherein the alloy contains 0.05 - 0.2 % by weight iron (Fe).

38. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains maximally 0.15 % by weight manganese (Mn).

39. (Previously Presented) The cast aluminum alloy of claim 17, wherein the alloy contains 0.4 - 0.8 % by weight manganese (Mn).

40. (Withdrawn, Previously Presented) A method of producing a cast part said method comprising:
casting a part comprising the alloy of claim 17 and
heat treating the part at a temperature of from 250 - 400°C to produce a thermally stressed cast part.

41. (Withdrawn, Previously Presented) The method of claim 40, wherein said casting step involves diecasting, sand casting, permanent mold casting, thixocasting, rheocasting or similar casting techniques.

42. (Withdrawn, Previously Presented) The method of claim 40, wherein said part is selected from the group consisting of cylinder heads, crankcases, heat-resistant safety components, air conditioner components and structural airplane components.

43. (Withdrawn, Previously Presented) The method of claim 40, wherein said part is selected from the group consisting of supersonic aircraft components, engine segments and pylons.